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| Hamilton-Wentworth District School Board Logo  **WESTDALE SECONDARY SCHOOL**  **HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD**  Westdale Logo**FRENCH IMMERSION DEPARTMENT** | |
| **MPM2D1I – PRINCIPLES OF MATHEMATICS/PRINCIPES DE MATHÉMATIQUES**  GRADE 10 ACADEMIC | |
| **Course Description:** This course enables students to broaden their understanding of relations, extend their skills in multi-step problem solving, and continue to develop their abilities in abstract reasoning. Students will pursue investigations of quadratic functions and their applications; solve and apply linear systems; solve multi-step problems in analytic geometry to verify properties of geometric figures; investigate the trigonometry of right and acute triangles; and develop supporting algebraic skills.  **Ministry Guideline:** Mathematics, Grades 9 and 10, revised 2005  **Credit Value:** 1  **Prerequisite(s):** MPM1D1I  **Textbooks/Required Materials:** scientific calculator | |
| **TEACHER INFORMATION** | |
| **Teacher:** Ms. J. Rimnyak  **Phone Number:** 905-522-1387 ext. 610 | **Email:** jrimnyak@hwdsb.on.ca  **Website:** rimnyakonline.wikispaces.com  **Twitter:** @MissRimnyak |
| **COURSE CURRICULUM** | |
| **Curriculum Strands and Overall Expectations:**  Quadratic Functions (Les fonctions du second degré)  - determine the basic properties of quadratic relations;  - relate transformations of the graph of y=x^2 to the algebraic representation y=a〖(x-h)〗^2+k;  - solve quadratic equations and interpret the solutions with respect to the corresponding relations;  - solve problems involving quadratic relations.  Analytic Geometry (La géométrie analytique)  - model and solve problems involving the intersection of two straight lines;  - solve problems using analytic geometry involving properties of lines and line segments;  - verify geometric properties of triangles and quadrilaterals, using analytic geometry.  Trigonometry (La trigonométrie)  - use their knowledge of ratio and proportion to investigate similar triangles and solve problems related to similarity;  - solve problems involving right triangles, using the primary trigonometric ratios and the Pythagorean theorem;  - solve problems involving acute triangles, using the sine law and the cosine law. | |
| **ASSESSMENT & EVALUATION** | |
| **Determination of Final Grade:**  Students’ final marks will be calculated using the following weighting:  Term Work 70%  Final Culminating Task(s) 5%  Final Examination 25%  Final Mark 100%  All curriculum expectations will be accounted for in instruction, but evaluation focuses on students’ achievement of the *overall* expectations. Teachers will ensure that student work is assessed and/or evaluated in a balanced manner with respect to the four categories of the achievement chart in the Ontario Curriculum *(Knowledge and Understanding, Thinking and Inquiry, Communication, Application).*  Students will be given multiple opportunities to demonstrate and meet the curriculum expectations as outlined above through a variety of assessments including, but not limited to: conversations, observations, presentations, quizzes, tests, a final examination and other products.  Teachers will take various considerations into account before making a decision about the grade to enter on the report card. Determining a final grade will involve a teacher’s professional judgment and interpretation of the evidence, and should reflect the student’s most consistent level of achievement, with special consideration given to the most recent evidence.  In addition to curriculum expectations, students' learning skills will be assessed throughout the course, and will be communicated during the reporting period. The six learning skills (Responsibility, Organization, Independent Work, Collaboration, Initiative, and Self-Regulation) will be evaluated using a four point scale (E—Excellent, G—Good, S—Satisfactory, N—Needs Improvement). | |